

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2000180631
PUBLICATION DATE : 30-06-00

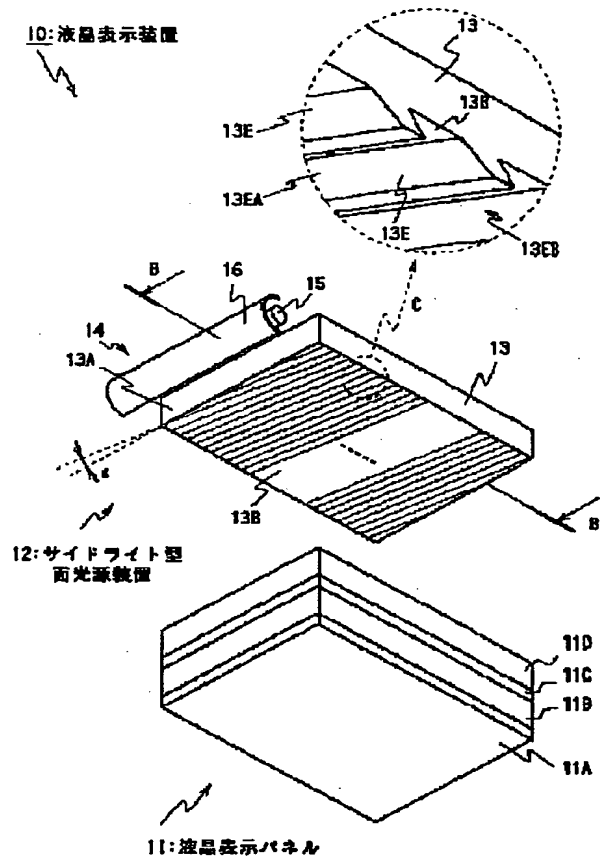
APPLICATION DATE : 10-12-98
APPLICATION NUMBER : 10350809

APPLICANT : ENPLAS CORP;

INVENTOR : OSUMI KAZUMASA;

INT.CL. : G02B 6/00 F21V 8/00 G02F 1/1335

TITLE : LIGHT GUIDE PLATE, SIDE
LIGHT-TYPE SURFACE LIGHT
SOURCE DEVICE AND LIQUID
CRYSTAL DISPLAY DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To display the display image plane with the sufficient quantity of light even when the projections are formed small to make them inconspicuous by arranging a plurality of projections forming an outgoing functional surface of a light guide plate in a state that they are inclined to a plane of incidence.

SOLUTION: A light guide plate 13 comprises projections 13E repeatedly formed on a back surface (outgoing functional surface) 13B. The projections 13E are inclined to a plane of incidence 13A by a predetermined angle α , and successively repeated from the plane of incidence 13A side. Whereby the projections 13E function with a width wider than an actual width for outgoing the illumination light L relative to the illumination light L coming from the plane of incidence 13A side, so that the illumination light can be outgoing without impairing the function of the outgoing functional surface even when the projections are made small to be inconspicuous. In a case when the projections 13E are provided with the function for outgoing the illumination light like this, an angle α between the projections 13E and the plane of incidence 13A is preferably within a range of 5-45 degree, and more preferably within a range of 15-30 degree.

COPYRIGHT: (C)2000,JPO

BEST AVAILABLE COPY